

# Siemens Neptune HVDC Converter Station Project

Sayreville, NJ and Hempstead, NY

# Projects



## HIGHLIGHTS

### ◆ The Conti

Group's idea of using closed-in pipe piles in the construction for the AC/DC conversion plant has helped save money and accelerate the schedule on the Neptune Project.

One of the major problems facing New York's Long Island is its need for electricity generated on the mainland. In order to increase the supply of electricity to Long Island, Neptune Regional Transmission System, LLC has been founded to build a 660-megawatt, 65-mile electric transmission line from Sayreville, New Jersey to Nassau County, New York via undersea and underground cable.

Neptune has partnered with Siemens and The Conti Group to construct the building and infrastructure needed to house the plants that will convert AC current to DC current in New Jersey, and convert this DC current back to AC in Long Island.

"With this project, Long Island will have greater access to less expensive sources of electricity," says Bill Weber, Conti's project manager for the project. "Not only will this help lower Long Island's electric bills, but it will also help reduce the chance of electric service interrup-

tions." The plants are designed to closely match the aesthetics of the surrounding communities. And thanks to sound barriers installed in and around the buildings, the only noise generated by the conversion plants will be a low hum, comparable to that of an air conditioner.

Even though underground electricity transmission is a new technology for Conti, the team has managed to develop value engineering proposals for the plants. For instance, Weber notes that the original design for the project called for 2,000 auger cast piles. However, in reviewing the design, the team realized that closed-in pipe piles could be used instead. This value engineering proposal has not only helped accelerate the project, but also provided significant savings to the client.

